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10/048,057

01/25/2002

Michel Habert

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06/26/2006

MILES & STOCKBRIDGE PC  
1751 PINNACLE DRIVE  
SUITE 500  
MCLEAN, VA 22102-3833

EXAMINER

SHIFERAW, ELEN I A

ART UNIT

PAPER NUMBER

2136

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/048,057             |  | HABERT, MICHEL      |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Eleni A. Shiferaw      |  | 2136                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

2. Claims 1, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 1 and 11 recite the limitation "web server" and "server of said second system" in lines 12 and 7 respectively and further recite "the server" on lines 13 of claim 1 same rejection applies on claim 11. It is unclear which server applicant is trying to refer to. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over W. Stallings, 1999 (Stallings, "Cryptography and Network Security, Principles And Practice, 2<sup>nd</sup> edition.") in

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view of WAP forum, March 29, 2000, ("WAP –195-WAWOverview) and Hollstrom et al. USPN 6,763,247 B1.

As per claim 1, Stallings teaches a method for secure communication between first and second entities interconnected via an internet network, said entities being associated with respective first and second processing systems connected to said internet network, said first system operating in client mode and said second system operating in server mode, said method comprising:

assigning respective permanent internet addresses to said first and second entities (Stallings page 400 section 13.1 par. 3),

making at least one application, located in a server of said second system, accessible to said first entity (Stallings page 400 section 13.1 lines 37-page 401 lines 2, and fig. 13.1), and

to encrypting data exchanged between said first and second entities in conformity with a desired security protocol (Stallings page 401 lines 7-12, and fig. 13.1), wherein said first and second systems include a communication protocol stack having at least one layer which allows for said encrypting step to be performed (Stallings page 400-401 section 13.1).

Stallings fails to explicitly disclose wherein the second entity hosts a WAP gateway utilizing a web server application interface adapter as amended.

However WAP forum discloses a WAP gateway utilizing a web application interface adapter (pages 21-22 section 7.5).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the teachings of WAP forum within the system of Stallings because it would security provide a web applications to end users.

Stallings and WAP forum fail to explicitly disclose the amended subject matter wherein the server is capable of communicating, via the web server application interface adapter, directly with a first type of WAP application and via a web container and at least one specific application program interface with a servlet WAP application.

However Hollstrom et al. discloses a WAP server, capable of submitting digital information related to the functionality of the external utility device, and/or web pages like wireless markup language (WML), over the point-to-point communication link to the WAP browser of the client mobile telephone, is capable of communicating WML server application interface adapter, directly with a WAP application, and via a container and at least one specific application program interface with a WAP application (col. 2 lines 22-36 and fig. 3 element 340) that reads on capable of communicating, via the web server application interface adapter, directly with a first type of WAP application and via a web container and at least one specific application program interface with a servlet WAP application.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Hollstrom et al. within the combination system of Stallings and WAP forum because they are analogous in data communication. One would have been motivated to do so because it would allow accessing the web server and providing web pages to users in WAP technology.

As per claim 11, Stallings teaches a system architecture for secure communication between first and second entities interconnected via an internet network, said entities respectively being associated with first and second data processing systems within a set of distributed systems

connected to said internet network, said first system operating in client mode and said second system operating in server mode, said first and second entities being associated with permanent internet addresses, comprising:

a server included in said second system, said server comprising at least one application accessible to said first entity (Stallings page 400 section 13.1 lines 37-page 401 lines 2, and fig. 13.1);

first and second communication protocol stacks respectively included in said first and second systems, each of said first and second communication protocol stacks comprising at least one address layer using a respective one of said permanent IP addresses (Stallings page 400 section 13.1 par. 3) and a logical layer for encrypting, in end-to-end mode in conformity with a given security protocol, data exchanged between said first and second entities (Stallings page 400-401 section 13.1, and page 411 fig. 13.5).

Stallings fails to explicitly disclose wherein the second entity hosts a WAP gateway utilizing a web server application interface adapter as amended.

However WAP forum discloses a WAP gateway utilizing a web application interface adapter (pages 21-22 section 7.5).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the teachings of WAP forum within the system of Stallings because it would security provide a web applications to end users.

Stallings and WAP forum fail to explicitly disclose the amended subject matter wherein the server is capable of communicating, via the web server application interface adapter, directly with a first type of WAP application and via a web container and at least one specific application

program interface with a servlet WAP application.

However Hollstrom et al. discloses a WAP server, capable of submitting digital information related to the functionality of the external utility device, and/or web pages like wireless markup language (WML), over the point-to-point communication link to the WAP browser of the client mobile telephone, is capable of communicating WML server application interface adapter, directly with a WAP application, and via a container and at least one specific application program interface with a WAP application (col. 2 lines 22-36 and fig. 3 element 340) that reads on capable of communicating, via the web server application interface adapter, directly with a first type of WAP application and via a web container and at least one specific application program interface with a servlet WAP application.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Hollstrom et al. within the combination system of Stallings and WAP forum because they are analogous in data communication. One would have been motivated to do so because it would allow accessing the web server and providing web pages to users in WAP technology.

As per claims 2 and 12, Stallings further teaches a method, wherein said permanent IP addresses assigned to said first and second entities conform to an IPV6 Internet address protocol (Stallings page 400 section 13.1 par. 3).

As per claim 3, Stalling further teaches a method, wherein communications through said internet network take place in conformity with an IPV4 Internet address protocol, and wherein said

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method further comprises:

executing, in at least one of said first and second systems, an address conversion step which includes converting said IPV4 internet address protocol to said IPV6 internet address protocol (Stallings page 400 section 13.1 lines 16-19, and page 405 lines 14-16).

As per claim 4, Stalling further teaches a method, wherein said encrypting step is performed in conformity with an IPSec protocol in tunnel mode, in order to obtain secure data exchanges between said first and second entities, and wherein said IPSec protocol is used with an EPS mechanism for authenticating information sources (Stallings page 402-408 section 13.2).

As per claim 5, Stalling further teaches method, wherein said first entity is a user of said first system, wherein said method further includes a step for authenticating said user (Stallings page 400 section 13.1 lines 14-19), and wherein said permanent IP address assigned to said first entity is used to identify said user (Stallings page 401 fig. 13.1, and page 400-401 section 401).

As per claim 6, Stalling further teaches a method, wherein communications through said network take place in data packet mode, and wherein said permanent IP address identifying said user is present in encrypted form in conformity with said IPSec protocol, in each of said data packets (Stallings page 408-413 section 13.3, and fig. 13.6).

As per claims 7 and 15, WAP forum further teaches a method, wherein said first system is connected to a wireless transmission segment wherein communications between said first system



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and said second system take place in conformity with a WAP protocol, wherein said second system includes at least a first module constituting a WAP server and a second module forming a unified interface between said WAP server and said at least one application, and wherein said WAP server is integrated into said second system as a web server (WAP forum pages 23-24 section 705, and fig. 6). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the teachings of WAP forum within the combination system because it would allow to provide wireless applications to the end users (WAP forum pages 23-24 section 705, and fig. 6).

As per claim 8, WAP forum further teaches a method, wherein said second system includes an additional module for performing two-way interface adaptation of structures, which makes it possible to support application interfaces used by web servers (WAP forum pages 23-24 section 705, and fig. 6). The rationale for combining are the same as claim 7 above.

As per claim 9, Stallings and WAP forum further teach all the subject matter as described. In addition, WAP forum teaches a method, wherein said first system includes a WAP browser (WAP forum pages 23-24 section 705, and fig. 6). The rationale for combining are the same as claim 7 above.

As per claim 10, Stallings and WAP forum further teach all the subject matter as described. In addition, WAP forum teaches a method, wherein said first system includes a mobile system, wherein said method further includes assigning to said first system a temporary address, and

initiating a dialog between said first system and a home agent connected to said internet network to correlate said permanent address assigned to said first entity with said temporary address, in conformity with said IPV6 protocol (WAP forum pages 23-24 section 705, and fig. 6). The rationale for combining are the same as claim 7 above.

As per claim 13, Stallings and WAP forum teach all the subject matter as described above. In addition Stallings teaches an architecture, wherein said internet network conveys data packets in conformity with an IPV4 protocol,

wherein each of said first and second protocol stacks includes a first address layer in the IPV6 protocol and a second address layer in the IPV4 protocol from which PV6-compatible addresses are derived, in order to obtain exchanges in tunnel mode (Stallings page 400 section 13.1 lines 16-19, and page 405 lines 14-16), and

wherein said logical layer in each of said first and second protocol stacks encrypts data packets exchanged between said first and second entities (Stallings section 13.1-13.2).

As per claim 14, Stallings and WAP forum teach all the subject matter as described above. In addition Stallings teaches an architecture, wherein said logical layer in each of said first and second protocol stacks conforms to an IPSec protocol in tunnel mode, in order to obtain secure data exchanges

between said interconnected first and second entities, and wherein said IPSec protocol is used with an EPS mechanism for identifying information sources (Stallings page 402-408 section 13.2).

As per claim 16, Stallings and WAP forum further teach all the subject matter as described. In addition, WAP forum teaches an architecture, wherein said second system includes at least one additional module for two-way conversion of data packets of structures in conformity with web or WAP protocols (WAP forum pages 23-24 section 705, and fig. 6). The rational for combining are the same as claim 7 above.

As per claim 17, Stallings and WAP forum further teach all the subject matter as described. In addition, WAP forum teaches an architecture, wherein said first system is a mobile telephone terminal operating in a GSM standard, said mobile telephone terminal including a WAP type browser constituting a client and a display screen for displaying pages in WML-type language (WAP forum pages 23-24 section 705, and fig. 6). The rational for combining are the same as claim 7 above.

As per claim 18, Stallings and WAP forum further teach all the subject matter as described. In addition, WAP forum teaches an architecture, wherein said first system is a mobile telephone terminal operating in a GPRS standard, said a mobile telephone terminal including an Internet browser constituting a client and a display screen for displaying pages in WML-type language (WAP forum pages 23-24 section 705, and fig. 6). The rational for combining are the same as claim 7 above.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jorgensen Pub. No.: US 2002/0099854 A1. Jorgensen discloses the teachings of WAP router, web application transmission, and Ipsec.

**Lee et al.**, USPN 6,609,150 B2, discloses WAP web servers serving web pages to client wireless device. A user requesting a web page to a WAP server and WAP server providing web to the client by communicating to web and WAP applications (see fig. 4 and abstract).

Zarom, USPN 6,356,529 B1, discloses WAP gateway and web server.

**Kalavade**, USPN 6,901,067, B1, teaches a gateway utilizing WAP server and WEB server (see fig. 4).

**Srinivasan et al.**, US PG PUBS 2002/0022488 a1, teaches a WAP gateway functioning as part of Web origin server serving content (see par. 0030 last two lines).

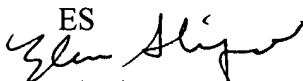
Please see form PTO 892 for more prior art references.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A. Shiferaw whose telephone number is 571-272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100